



Compartment Review Presentation

Traverse City Forest Management Unit

Compartment 61051

Entry Year 2019

Acreage: 2,160

County Grand Traverse

Management Area: Boardman Plains

Revision Date: 2017-05-23

Stand Examiner: Pat Ruppen

Legal Description:

T26N R10W Sections 13, 22 through 26

Identified Planning Goals:

This compartment falls within the Boardman Plains Management Area. Vegetation management in the Boardman Plains management area (MA) will provide forest products; maintain or enhance wildlife habitat; protect areas of unique character including the Boardman River (a designated natural river) and the Sand Lakes Quiet area (a designated high conservation value area), threatened, endangered and special concern species; and provide for forest-based recreational uses. Timber management objectives for this 10-year planning period include improving the age-class structure of aspen; increasing regeneration of oak; working toward balancing the red pine age-class structure; continuing emphasis on managing the northern hardwood resource for stand quality, age, and species diversity; wildlife values; and continued production of wood products. Wildlife habitat management objectives include perpetuating early-successional communities for species adapted to young forests for hunting and other wildlife-related recreation opportunity. Expected trends within this 10-year planning period are: increased recreational pressure, especially on the Muncie Lakes pathway, North Country and other established trails; increased oil and gas development; an increased wildland/urban interface; a need to restore oak/pine barrens communities; invasive plant control; and the conversion of poor oak sites to mixed pine/oak sites. Most of this compartment falls within a sandy outwash plain, much of which was fire prone oak-pine barrens or pine forest circa 1800. Current vegetation on state lands is dominated by various mixtures of white oak, jack pine, white pine, red oak, aspen, red maple and red pine, much of which is mature to over mature.

Inventory of recent harvests in this compartment showed some consistent trends.

Regeneration was generally good in areas that had been final harvested with retention. Lower levels of over story retention (10-20 ba) resulted in better regeneration of oak, jack pine, red maple, aspen, white pine. There is a trend toward white pine induction into understories. Low amounts of natural red pine seedlings was observed. Harvests with higher levels of retained over story had less regeneration success. Heavy deer browsing on aspen and oak was noted in some stands and led to poor recruitment of these species into the new stands.

Specific actions recommended for this entry period include the following. Three mixed stands are recommended for final harvest with retention followed by trenching and planting of red pine in a weave pattern around retention. A large area of failed regeneration from last entry period is recommended for trenching and planting of red pine. This treatment has already been approved through the Chapter 11 process. A red pine stand is recommended for intermediate thinning. A large area of declining jack pine is recommended for final harvest with retention. This area will be trenched and planted to red pine after harvest. The result will be a mixed stand with a good red pine component. Another stand was shelterwood harvested in another entry. It is recommended that most of the remaining over story be removed to allow understory to develop and fill in. Finally, a small mature aspen stand is recommended for final harvest to regenerate the stand.

Various recreational facilities, the Boardman River, and the adjacent Brown Bridge Quiet Area provide a high amount of recreational opportunity in and around this compartment. Management activities should be considerate of these recreational and aesthetic values.

Soil and topography:

Soils are predominantly Rubicon sands. Low lying areas in the Boardman River Valley have Kerston muck soils. Topography is generally flat to gently rolling. Some steeper banks, terraces and bluffs are associated with the Boardman River and East Creek.

Ownership Patterns, Development, and Land Use in and Around the Compartment:

There are numerous rural residential properties concentrated within the compartment and to the south, most of which are on relatively large lots. Lands to the north and east are mainly state forest. There are also three large tracts of relatively

undeveloped land adjacent to the compartment: the Brown Bridge Quiet Area owned by Traverse City, and Boy Scout Camp Greilick and the East Creek Preserve, both owned by Rotary Camps and Properties.

Unique Natural Features:

The Boardman River flows through the north end of the compartment. East Creek, a tributary of the Boardman, cuts across the southwest corner.

Archeological, Historical, and Cultural Features:

There are no known significant sites within this compartment. There is some remaining evidence of homesteads and farming from the early to mid-1900s.

Special Management Designations or Considerations:

The Boardman River is a state designated Natural River. Its tributary, East Creek, is also encompassed by the Natural River designation.

Watershed and Fisheries Considerations:

This compartment contains a small section of Boardman River near the Brown Bridge Quiet Area, and a small section adjacent to East Creek. Reasonable buffers (as outlined in Water Quality Management Practices on Forest Land) and restrictions should be adhered to around all streams in this compartment. The Boardman River and East Creek are naturally reproducing, Type 1 designated trout streams; existing buffers appear to be appropriate for the proposed treatments.

Wildlife Habitat Considerations:

Mineral Resource and Development Concerns and/or Restrictions

There is no known metallic mineral potential in this region. No sand/gravel pits are located in the area, but there appears to be good sand potential and some gravel potential. The compartment is located within the Niagaran reef trend. The majority of the State-owned mineral rights in the area are currently leased for oil and gas development and much is held by production. The Antrim Shale has not been developed in this area and may be too deep.

Vehicle Access:

Access is quite good throughout the compartment. The only exception is in the north ¼ of section 13 within the Boardman River valley. Low lying areas there are difficult to access for timber management, except perhaps during extended dry periods. In section 13, a road leading to an abandoned oil well pad and a connected unauthorized 2-track are being proposed for closure because of erosion, trash dumping, and ORV damage.

Survey Needs:

Corners are reasonably well monumented. There are no specific survey needs known at this time.

Recreational Facilities and Opportunities:

The Shore to Shore Equestrian and Hiking trail and snowmobile trail 5 & 510 are located within this compartment. Facilities within this compartment include Scheck's State Forest Campground, and an ORV parking lot located off Knight Rd. Trail protection specifications, as well as appropriate aesthetic concerns near the facilities should be taken into consideration during treatment operations. (T.M.N. 10/10/16)

Fire Protection:

Most of the sections in this Compartment are in Zone 6. It consists of a mixture of cover types, and is heavy to recreation. The potential here for a large fire exists, particularly with the amount of people that use and travel through this area. Access is adequate in most of this area, with roads at least around most of the sections. There are not a lot of urban interface issues, as not too many residences are in this compartment. Additionally there is the Boardman Valley snowmobile trail that can be used for access. Battalion #2-Grand Traverse Rural Fire Dept. has initial attack responsibility for this area. On high fire danger days and above, DNR Units from Traverse City, Manton, and Kalkaska respond to fires in Zone 6.

Additional Compartment Information:

The following reports from the Inventory are attached:

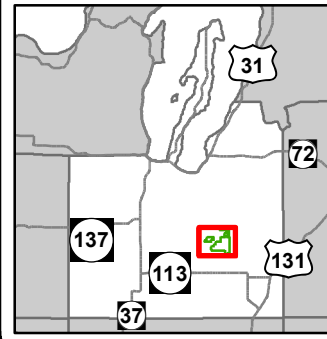
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

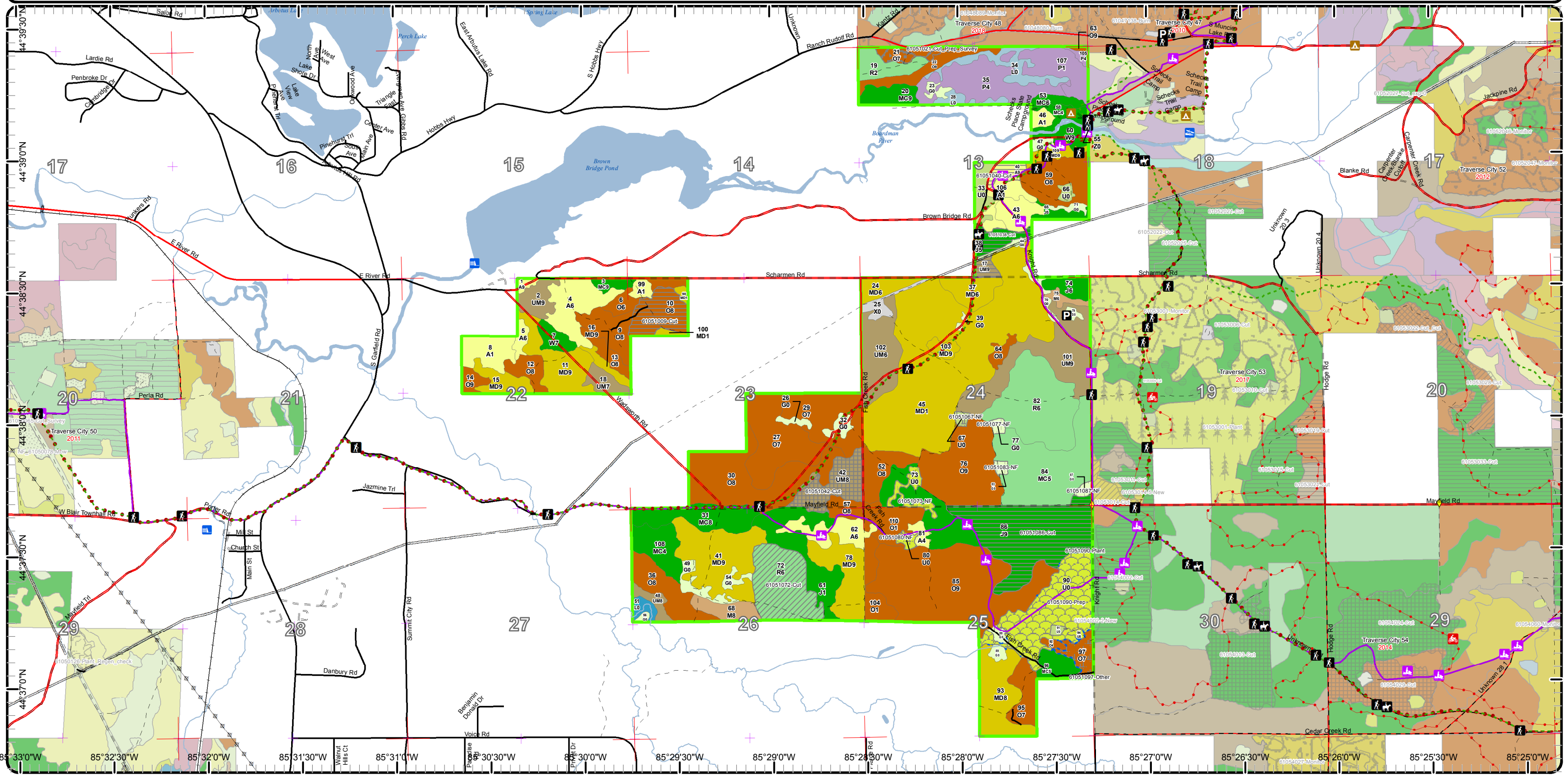
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

Cover Type & Treatments Map

Compartment: 51
 T26N R10W Sec. 13, 22-26
 County: Grand Traverse
 Unit: Traverse City
 Mgmt Area: Boardman Plains
 YOE: 2019
 Acres: 2159.8 GIS Calculated
 Examiner: Pat Ruppen
 Map Revised: 8/4/2017
 Map Phase: Post-Review

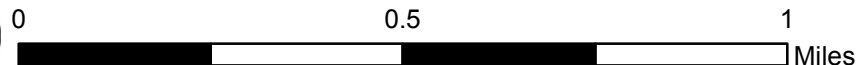
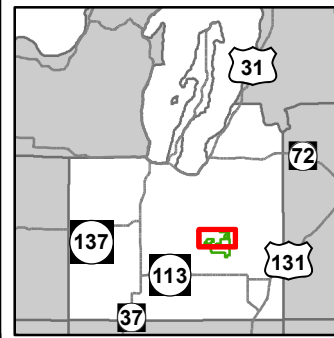


- Miris Corners
- + Remonumented Section Corners
- ◆ Survey Grade GPS Corners
- Counties
- Bridge
- Culvert
- Dams
- Boating Access Site
- Campground
- Parking Lot
- Trailhead
- Bike Trails
- Motorcycle Trails (DNR License)
- Hiking Trails
- Horse Trails
- Ski Trails
- Snowmobile Trails
- - - Designated Hiking Trails
- - - Designated Bicycle Trails
- ● ● Designated Equestrian Trails
- ● - ORV License & Trail Permit
- - - Designated Snowmobile Trails
- County Paved Roads
- Paved Roads
- County Gravel Roads
- - - Gravel Roads
- - - County Poor Dirt Roads
- - - Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Pipeline
- Compartment Boundary
- Treatments with Site Conditions
- Site Prep
- Clearcut (w/Reserves)
- Planting (tree species)
- Other Treatment - See Comments
- Opening Maintenance
- Regeneration Survey
- Thinning (Crown, Low, Systematic)
- Seed Tree (w/Reserves)
- 500 - Water
- 622 - Lowland Shrub
- 629 - Mixed non-forested wetland
- Lakes
- 411 - Northern Hardwood
- 412 - Oak Types
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 422 - Natural Pines
- 430 - Upland Mixed Forest
- 611 - Lowland Deciduous Forest
- 110 - Low Intensity Urban
- 310 - Herbaceous Openland
- 320 - Upland Shrub
- 330 - Low Density Trees

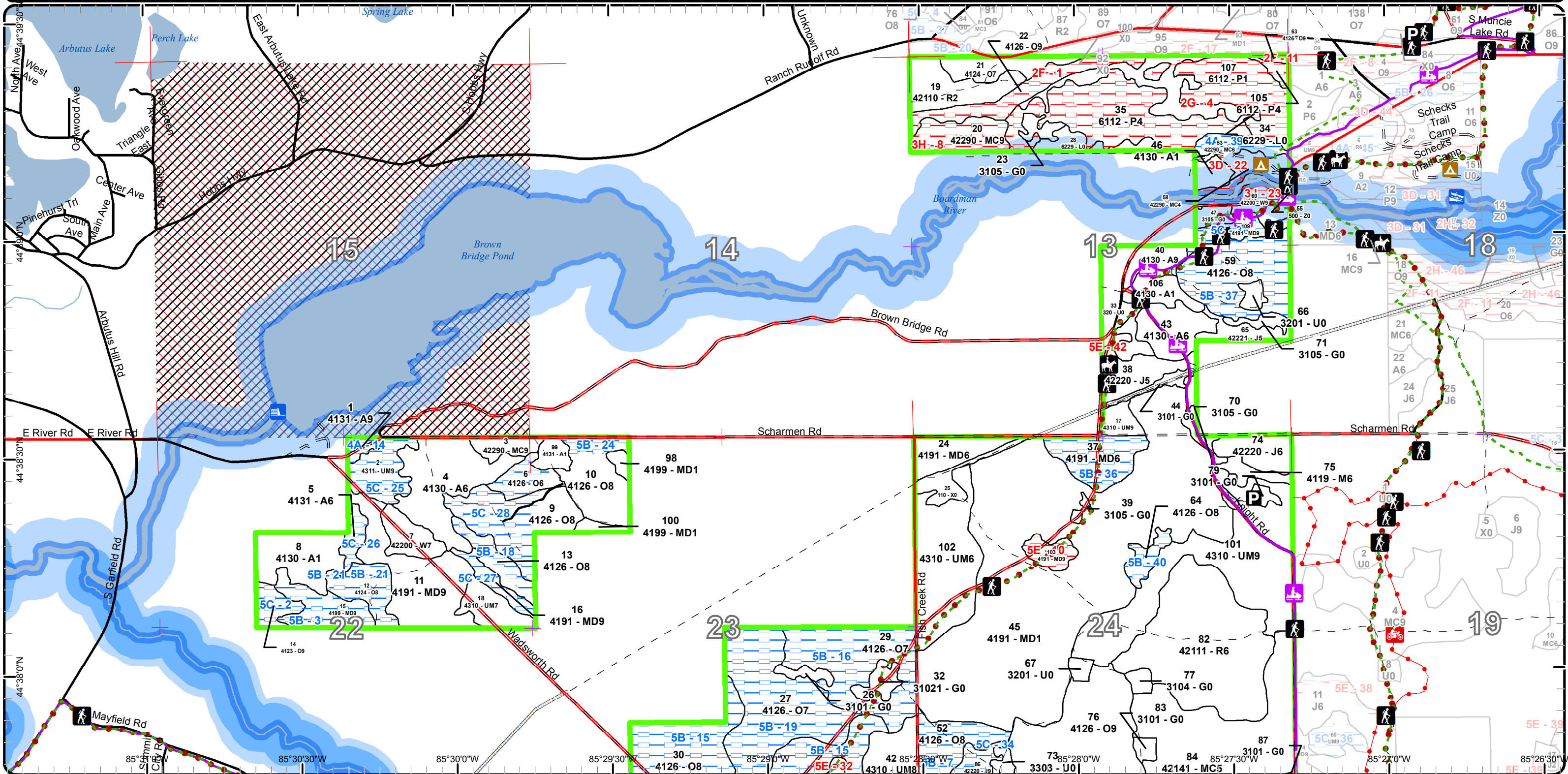


Special Conservation Areas & Site Conditions Map

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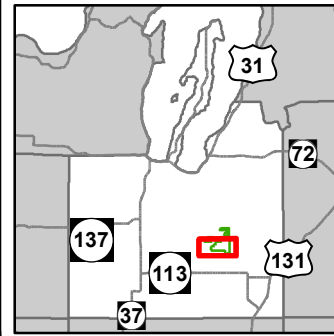


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- County Paved Roads
- Paved Roads
- County Gravel Roads
- Gravel Roads
- Poor Dirt Roads
- Streams
- Lakes and Rivers All
- Pipeline
- Compartment Boundary
- Available w/ Constraints
- Unavailable
- 3D: Recreational / Scenic values
- 3J: Water quality / BMPs (stream, river, or lake)
- 5E: Long-Term Retention
- Stand Boundaries
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- Cold Water Streams
- Cold Water Lakes
- High Priority Trout Stream Buffer
- 4A: No Markets Available for these Forest Products
- 5B: Maintain for regeneration purposes
- 5C: Delay treatment for age/size class diversity or exceptional site quality
- 2F: Too steep
- 2G: Too wet (sensitive soils, does not include access issues)

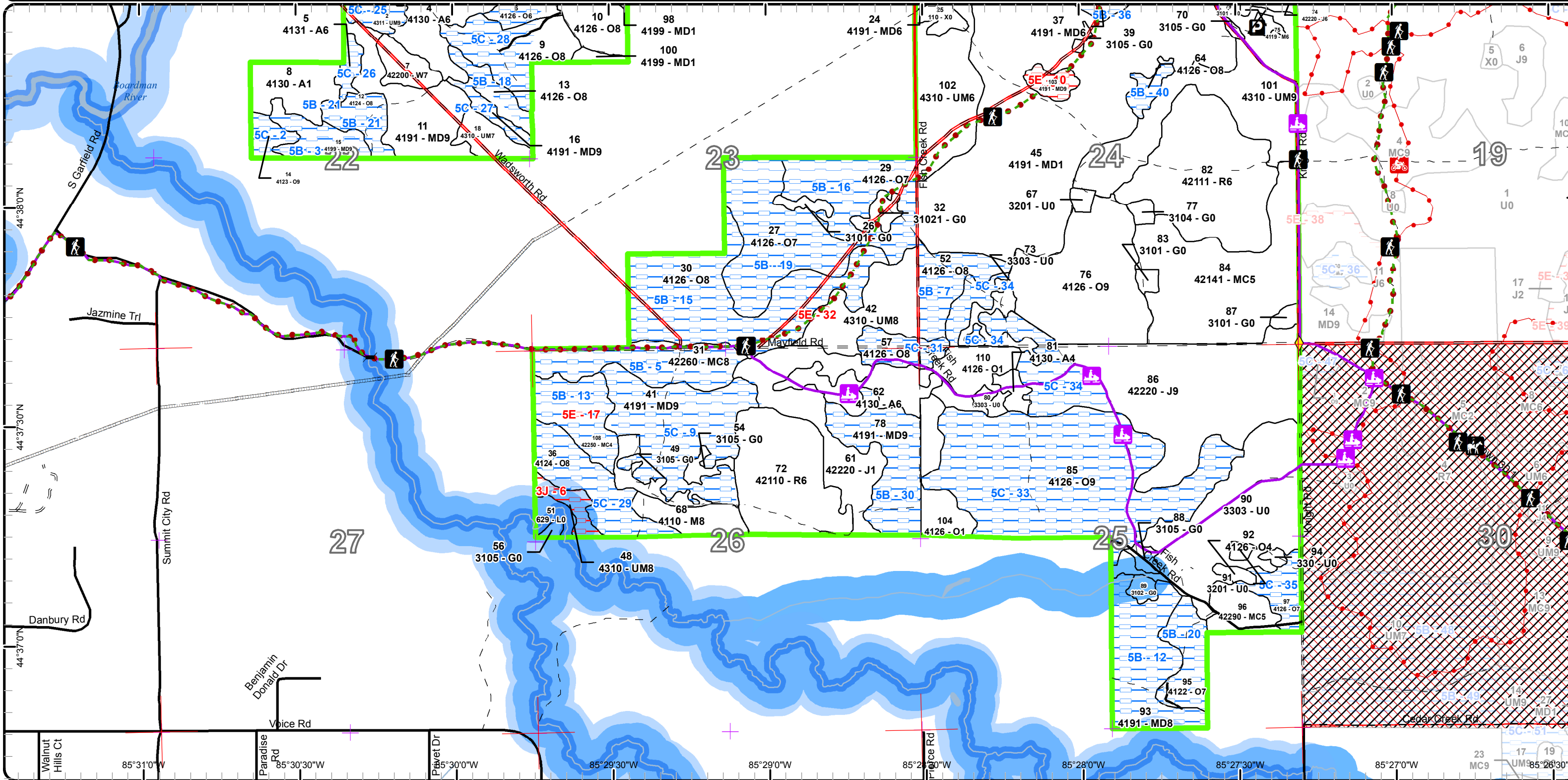


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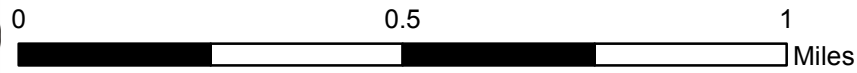
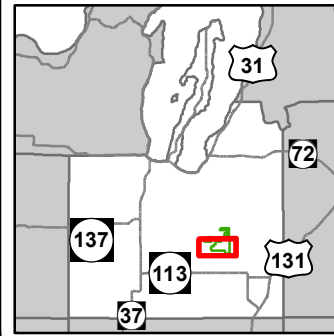


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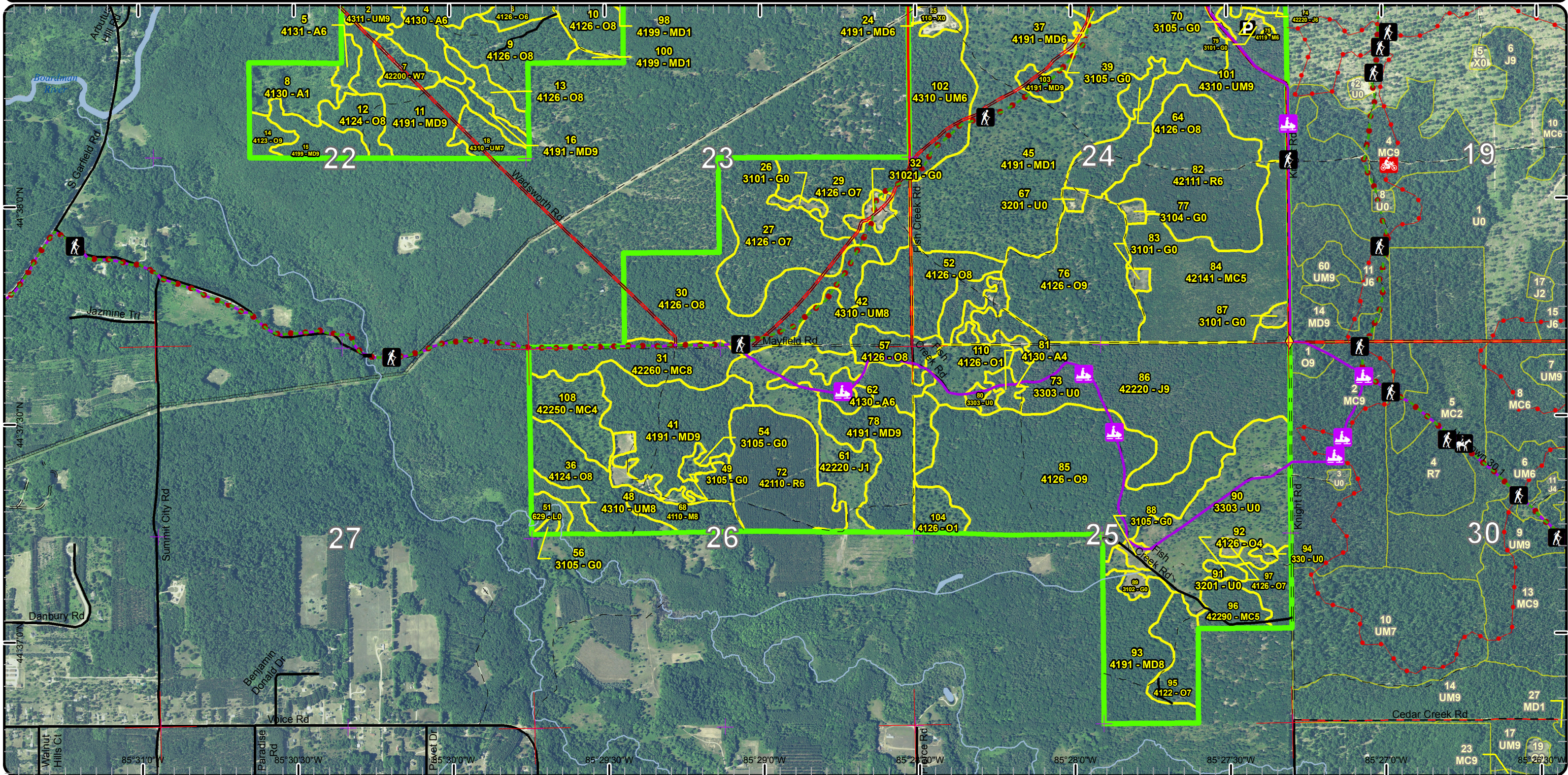


Stand Boundary Map

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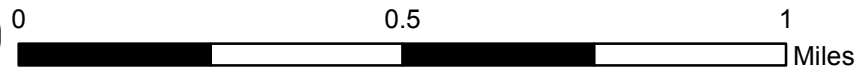
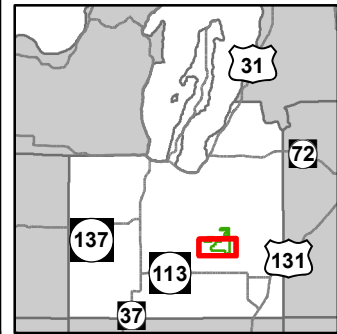


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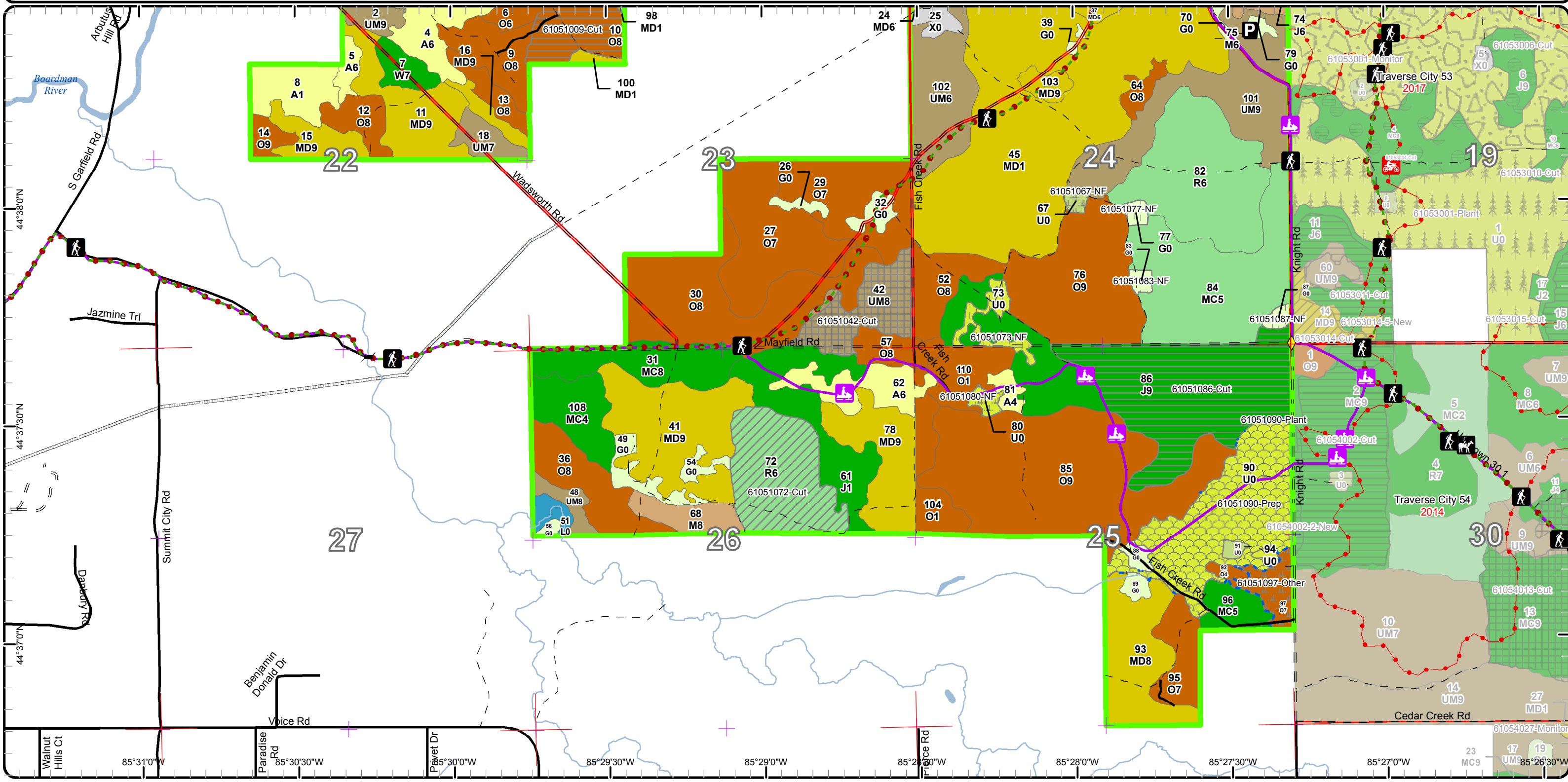


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- Other Treatment - See Comments
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Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	40	0	14	0	55	5	10	0	0	0	0	0	0	0	0	0	0	124
Herbaceous Openland	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Jack Pine	0	40	0	0	0	0	16	125	12	0	0	0	0	0	0	0	0	0	193
Low-Density Trees	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
Lowland Aspen/Balsam Poplar	0	26	0	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	73
Lowland Shrub	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
Mixed Upland Deciduous	0	224	0	0	0	11	7	0	31	33	0	45	0	0	0	0	0	94	445
Natural Mixed Pines	0	0	0	22	0	0	12	0	13	0	0	0	0	0	0	0	0	53	100
Northern Hardwood	0	0	0	0	0	0	0	4	0	0	0	13	0	0	0	0	0	0	17
Oak	0	34	0	0	0	0	2	0	0	16	47	244	29	34	0	0	127	91	624
Planted Mixed Pines	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
Red Pine	0	0	0	16	0	49	70	0	0	0	0	0	0	0	0	0	0	0	135
Upland Mixed Forest	0	0	0	0	0	9	0	5	0	7	42	0	0	0	0	0	0	100	163
Upland Shrub	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Urban	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Water	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
White Pine	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	10	19
Total	191	364	0	105	22	133	100	152	63	67	122	244	87	34	0	0	127	348	2158



Report 2 – Treatment Summary

Traverse City Mgt. Unit
Year of Entry: 2019

Compartment 51
Total Compartment Acres: 2,160

Acres of Harvest

Commercial Harvest -
Harvests with Site Condition - 0
Next Step Harvest - 0
Habitat Cut - 0



S
t
a
n
d

Treatment
Name

Acres

Stand
CoverType

Size
Density

Stand
Age

BA
Range

Treatment
Type

Treatment
Method

Cover Type
Objective

Age
Structure

Approval
Status

#Type!

Habitat Cut:

Site Condition:

Prescription
Specs:

Next Step
Treatments:

Acceptable
Regen:

Other
Comment:

Proposed Start Date:

**Total Treatment
Acreage Proposed: 0.0**

**Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
2	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
3	Available	5B: Maintain for regeneration purposes	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
4	Unavailable	2G: Too wet (sensitive soils, does not include access issues)	73	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
7	Available	5B: Maintain for regeneration purposes	19	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Pat Ruppen : Examiner

Compartment: 51

Year of Entry: 2019

8	Unavailable	3H: Deer Wintering Area - habitat is incompatible with harvest at this time	13	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
9	Available	5C: Delay treatment for age/size class diversity or exceptional site quality	56	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
11	Unavailable	2F: Too steep	1	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
12	Available	5B: Maintain for regeneration purposes	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
14	Available	4A: No Markets Available for these Forest Products	3	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
15	Available	5B: Maintain for regeneration purposes	72	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Report 4 – Site Conditions

Traverse City Mgt. Unit

Pat Ruppen : Examiner

Compartment: 51

Year of Entry: 2019

16	Available	5B: Maintain for regeneration purposes	39	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
18	Available	5B: Maintain for regeneration purposes	7	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
19	Available	5B: Maintain for regeneration purposes	50	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
20	Available	5B: Maintain for regeneration purposes	17	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							
21	Available	5B: Maintain for regeneration purposes	11	Unspecified	Unspecified	Unspecified	Unspecified
Comments:							

Mgt. Unit

Compartment: #Type!

Year of Entry:



Report 5 – PROPOSED SPECIAL CONSERVATION AREA* (SCA) DETAILS

* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
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Comments



Report 6 – EXISTING SPECIAL CONSERVATION AREA DETAILS

* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area
HCVA = High Conservation Value Area
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Cold Water Lake	A coldwater lake has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species to persist from year to year. Suitable conditions for coldwater fishes may occur in Michigan lakes if they are relatively deep, have substantial groundwater inflows, or are located in colder (northern) areas of the state. Such lakes are established by Director's action and designated as trout resources by Fisheries Order 200.
SCA	Cold Water Stream	A coldwater stream has temperature and dissolved oxygen conditions that allow naturally-reproduced or stocked trout populations and those of other coldwater fish species (e.g., slimy sculpin) to persist from year to year. Coldwater streams in Michigan typically provide these conditions due to substantial contributions of groundwater to their stream flows. Such streams are established by Director's action and designated as trout resources by Fisheries Order 210.
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.



Stand	Traverse City Mgt. Unit		Report 7 – Forested Stands			Compartment: 51 Year of Entry: 2019
	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4131 - Aspen, Oak	Sawtimber Well	2.6	60	81-110	There are seeps south of the road. Most aspen is north of the road. Could use a regeneration cut, but it is a very small area. Let grow another 10 years, then reassess need for a cut. Will hold OK for now. 2017. Aspen is fine for now. Could harvest aspen but not much volume. South side of road is full of seeps so access would be difficult unless harvested with stand to south
2	4311 - Pine, Aspen Mix	Sawtimber Well	13.0	94	111-140	2017: older oak and pine is 95 age. younger pine and aspen and Red maple 60 yr age. some older aspen. Most of the aspen is younger age and would hold or aspen and red maple could be removed. Stand is trending toward white pine. 2007: Possible value as an old growth area or SCA. Some larger, veteran white and red pine to 30" or more.
3	42290 - Natural Mixed Pine	Sawtimber Well	5.6	66	81-110	Natural pine of multiple sizes and ages: numerous small poles and saplings, medium poles, and some larger veterans. More red pine to the east, more white pine west, small amounts of red maple and BT aspen. Ages from a medium red pine pole and a larger white pine. Stand was thinned 12/2011.
4	4130 - Aspen	Poletimber Well	31.0	40	81-110	2017: Good Mix. Aspen looks fine. 2007: Bigtooth aspen is tall and vigorous. Remnant white pine, white and red oak, red pine.
5	4131 - Aspen, Oak	Poletimber Well	4.8	53	111-140	trace red pine 2017 Aspen is good for now. Stand 11 may be the same as this stand or the north part of it?
6	4126 - White, Black, N. Pin Oak	Poletimber Well	7.9	96	81-110	2017: Poor quality oak. Wp in understory but light. Eastern part has been burned in wildfire.
7	42200 - Natural White Pine	Sawtimber Poor	9.0	45	1-50	2017: OAK, RED MAPLE, WP, AND A LITTLE RP FILLING IN GAPS. OAK IS GETTING BROWSED HEAVILY BUT SOME STUM SPROUTS HAVE PASSED BROWSE HEIGHT. LET STAND DEVELOP.
8	4130 - Aspen	Sapling Poor	19.2	5	Immature	2017: Good aspen regen in most areas but some of stand is heavier to red maple stump sprouts.
9	4126 - White, Black, N. Pin Oak	Sawtimber Medium	28.6	126	51-80	2017: oak regen is getting browsed. Most regen is rm/wp and it is light. Harvest part of stand that was burned by wildfire and plant to rp after harvest.
10	4126 - White, Black, N. Pin Oak	Sawtimber Medium	21.0	96	51-80	2017: Clean understory due to wildfire. RP is good and oak is fair. Some well formed oak. Stocking is not too high.
11	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	32.4	81	81-110	2017: Let stand develop. Look at next entry. Looks like most aspen and red maple along with some oak was cut about 40 yrs back. Aspen and red maple poles along with white pine poles and saplings growing through remaining oak and pine over story. Stand is complicated. South part of stand is has more oak overstory remaining with white pine sapling growing in. There may be a possibility of reducing the over story in this area to allow pine to develop. 2007: All sizes, ages of white pine. Could do some patch cuts with seed trees, releasing white pine saplings. Otherwise, let go for 10 years. Aspen and white pine are vigorous and growing. Trace of red pine.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
12	4124 - Red with White Oak	Sawtimber Medium	11.7	95	51-80	2017: There is a decent amount of white pine and a little red pine growing in the canopy gaps with room to grow. Let stand develop. This stand appears to have been thinned in the past. Quality is better on the oak as lower quality stems were removed in past treatment. Light to moderate pine understory with wp and some rp. Understory does not appear to have filled in much after harvest but understory pine left from last harvest is growing. This stand could be final harvested and trenched and planted or it is fine to let grow and put on further volume. Not known if this stand can be accessed for a chip job. 2007: Could do a shelterwood prep cut to promote oak regeneration & release white pine understory, but probably is best to leave this stand for 10 years while treating adjacent stands to retain mast production and to let pine saplings put on additional growth.
13	4126 - White, Black, N. Pin Oak	Sawtimber Medium	8.7	111	51-80	Poor quality oak on a dry, SW facing slope. Sparse overstory, but understory is becoming well stocked with white pine. Let this stand continue to succeed to white pine.
14	4123 - Red Oak	Sawtimber Well	6.2	95	81-110	2017: Trail marked through the stand on SW side. Stand could be thinned. Similar to stand 15 but more red oak in canopy and less aspen. If working in adjacent stand consider marking this for crop tree release otherwise it should be fine to let grow in. 2007: Could do a shelterwood prep cut, otherwise let it grow.
15	4199 - Other Mixed Upland Deciduous	Sawtimber Well	13.5	85	81-110	2017: aspen is declining and should be harvested. Some of the oak is decent quality mixed with red and white pine. Wp understory. 2007: Some variability in aspen ages; a second core had +/- 45 rings. Medium quality oak. could possibly do regeneration cuts for aspen, or remove aspen and thin to promote pine & oak.
16	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	5.6	117	51-80	Mixed type along a NE facing slope. Quite variable sizes/ages of white pine. Aspen in patches of different age classes. Let it grow and let white pine take over successionaly. Small amounts of jack pine and red pine in overstory.
17	4310 - Pine, Oak Mix	Sawtimber Well	4.8	63	1-50	Some older oak and pine scattered through stand with 60-70 aged aspen, red pine and oak and jack pine that has filled in gaps. Aspen is declining and jack pine is mature. Some areas will have low stocking where aspen and jack pine are prevalent. Oak will likely form in understory along with aspen and red maple sprouts. Small area so consider treating with stand 38. This stand was split off from stand 37.
18	4310 - Pine, Oak Mix	Sawtimber Poor	9.4	45	1-50	2017: Oak, wp and rm filling in the gaps. Heavy browsing on the oak but some sprouts past browse height. Pine poles and saplings were protected during harvest. 2011 Cut to 2" except green marked.
19	42110 - Planted Red Pine	Sapling Medium	16.3	20	Immature	2017: Red pine is growing well the last 5-6 years after slow start. Heavy stocking with this mix of rp, jp, oak, rm, wp. Almost pure red pine in central part of stand. Better growth there. Must have been an old opening that was planted. Scattered retention (oak logs) in stand. 2007: Abundant oak seedlings are heavily browsed, few have gotten beyond deer. Blueberry, poverty grass. A few red maple poles and stump sprouts.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
20	42290 - Natural Mixed Pine	Sawtimber Well	13.3	84	51-80	2017: Aspen and Jack pine will likely fall out of the stand unless harvested. This stand could be thinned if access through private property was attained. Take most aspen and jp and mark remaining stems for crown release. 2007: Stand is on 2 terraces in the Boardman River valley. Predominantly red pine on the upper terrace, more mixed on the lower terrace. Stand would benefit from a partial cut, removing aspen and jack pine, but access is a problem. Aspen and jack pine are declining; numerous snags. Understory conifers are thick in places. Stand is succeeding to white pine/fir as aspen/jack pine die out.
21	4124 - Red with White Oak	Sawtimber Poor	10.6	110	1-50	2017: TS# 079-08 Cut to 2" except green marked retention of pine and oak. Trenched and planted with red pine in a weave pattern in fall 2013. Fall planted red pine was very small and has had a slow start. Oak and red maple sprouts are browsed badly but a few have advanced. 2007: Possibly clearcut with residual seed trees: better quality oak and white pine, plus leave advanced WP regen. Jack pine is declining. Consider complimentary mgmt. with nearby Rotary Camp property for additional barrens restoration (consult w/Brian Picollo from WLD).
22	4126 - White, Black, N. Pin Oak	Sawtimber Well	15.5	89	81-110	2017: Mix on steep slope along river floodplain. 2007: Mortality in JP. Poor to medium quality oak.. Factor Limit due to slopes.
24	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	11.3	45	1-50	2017: Not enough jp to worry about. Let the rest of the stand grow in. Bigger old oak scattered in the stand with younger age class grown in. Jack pine is mature and may fall out of stand. Should harvest jp and mark stand for crop tree release if needed. 2007: Looks like it was cut about 1970-75, cut aspen and some oak, left pine and some oak. Younger age class is result.
27	4126 - White, Black, N. Pin Oak	Sawtimber Poor	50.4	105	51-80	2017: Oak canopy with pockets of natural rp/wp poles and logs. Some older pine scattered around in stand. oak understory is forming in canopy gaps ; much is still at browse height but some past. Thicker wp regeneration patch in south part of stand. Let stand develop. Pine component should put on good growth and regeneration should fill in and advance. TS# 043-99. TCR 2002. Cut all merchantable aspen, rm, jp, oak and rp16" + and wp14"+ 2007: Fairly open type. Some oak regeneration, but any stems taller than 1-2' have been browsed. Red maple stump sprouts, lots of blueberry, cladonia, wintergreen, poverty grass, and some sweetfern present.
29	4126 - White, Black, N. Pin Oak	Sawtimber Poor	38.6	105	1-50	2017: Good oak regeneration in patches. Low amount of wp seeding in. RM sprouts throughout and some aspen clones regenerating. Most aspen is on east edge of stand. Most oak is past browse height but not all. Switch stand to sapling /pole stand next inventory. Let stand develop for now. 2007: 2-storied stand. Moderately well stocked regeneration: seedlings and saplings RM, BC, A, O, WP. Some oaks are getting beyond browsing height. Mix of RM stump sprouts and seedlings. Blueberry, poverty grass, sedge ground cover.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
30	4126 - White, Black, N. Pin Oak	Sawtimber Medium	71.6	105	51-80	2017: Low density over story with thick wp saps/poles under. Recommend letting stand develop. A good bit of damage could result to the advanced white pine understory if more of the canopy is removed. Stands like this have been treated in the past with mixed results. Often the open areas left after the harvest do not continue to fill in with white pine resulting in a patchy stand. This would be a good chance to see what happens as this white pine grows through without further disturbance. Fire could be uncontrollable in this stand. Oak in canopy is lower quality. 2007: TS# 043-99. TCR 2002. Cut all merchantable aspen, rm, jp, oak and rp16" + and wp14"+2-storied stand. White pine regeneration is quite dense except in open skid lanes. Lots of blueberry, wintergreen. Fair amount of oak seedlings and sprouts, but they are heavily browsed if above the average snow depth line. Any future removal should favor understory cohort of white pine. Poor quality red oak, fair to poor white oak.
31	42260 - Natural Pine, Mixed Deciduous	Sawtimber Medium	30.8	70	111-140	2017: Multi aged wp/rp pine with oak and aspen mixed through. Thick wp/rp understory in places-saps and small poles. Parts of stand have a semi open understory. More rp canopy in east and wp canopy in west. Removing some of the canopy could be considered but damage to understory would be unwelcome. May be best to let stand develop and grow in. Thinning or re-starting may make sense in future. 2007: Mature pine, but not too dense, free to grow. Some substantially larger pine toward the east end of the stand. Trace amounts of quaking aspen, black cherry, witch hazel. Mixed deciduous saplings = RM, BC, WO.
35	6112 - Lowland Aspen	Poletimber Poor	44.7	70		2017: Wet lowland aspen/tag alder. West side of stand has an area with decent aspen stocking that may be high and dry enough to be harvestable. It would be good to try to get this stand regenerated. Could put a landing in a stand 23. Would need to get permission to use private road. 5-6 addressed posted on road. 2007: Patches of heavily browsed red osier dogwood. Traces of balsam fir, black spruce, red pine, white oak, and white cedar. Fair amount of CWD & snags. Phellinus in much of the aspen. Some slightly elevated portions of the stand have oak and pine components.
36	4124 - Red with White Oak	Sawtimber Medium	27.2	105	51-80	2017. Updated from TS completion Report. 2007: Variable ages in oak (second core showed 95 rings). Oak is fairly old, so stump sprouting would be iffy. Numerous snags and down logs. Younger trees, oak poles in SE corner, plus a small opening with little bluestem, cladonia and St. Johnswort. White pine understory is thicker at the south edge of the stand along the top of the bluff.
37	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	16.9	80	1-50	2017: Two-aged, looks like stand was opened up about 30-40 years ago. Mixed sizes of oak-logs, poles and saps. Some mature jp in stand. Younger JP, aspen, oak, WP filled in gaps. Let stand develop.
38	42220 - Natural Jack Pine	Poletimber Medium	12.2	74	51-80	2017: JP has heavy storm damage in spots. A lot of down debris in areas but we should try to get this stand harvested and cleaned up. Try to re-plant with red pine. Ground is slightly hilly but could be planted. Some big old red pine scattered in stand with younger ages of red pine mixed in. White oak in stand is generally low quality. 2007: There is a little mortality in the JP, but generally it appears reasonably healthy despite age and will likely hold well for 10 more years, unless a cut is desired for age class diversity this entry period. A few black cherry. The red pine appears to be mutli-aged; the cored tree was a larger, older specimen.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
40	4130 - Aspen	Sawtimber Well	7.2	66	111-140	2017: Harvest to restart stand. Treat with stand 38 and 17. . This Split this stand off creating stand 109. This aspen is declining and should be restarted. Not many acres. May need to include with another treatment. 2007:Variable density. Could cut this entry period. If held 10 more years, there may be substantial mortality in jack pine and quaking aspen. Some rot and mortality now. Variable density - stand includes some open, brushy patches. Scattered black cherry and red maple. A possible AOI is sketched on field map; excluded areas have more bigtooth, red pine, white pine, and oak and will hold.
41	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	56.0	67	81-110	2017: Mixed oak .Log/pole in canopy with aspen, rp,wp,rm. Some older oak and pine scattered through but most is likely @67 yr age Wp/rp coming in-poles/saplings Some natural rp poles grown in. Aspen is pretty scattered around in stand and will likely fall out. Best to let this stand grow in for now. 2007:Lots of pole and sapling white pine, aspen is in patches, and a component of older WO/WP/RM. Vigorous, multi-sized and -aged white pine should be allowed to take over the stand, but could perhaps do some block cuts for aspen/WP regen. where aspen is dense enough (but aspen is low quality). Little CWD present. BA's recorded: 170, 100, 80, 90, 130. Some red pine and cherry.
42	4310 - Pine, Oak Mix	Sawtimber Medium	29.2	93	81-110	2017: Canopy gaps filling in with oak and white pine along with some aspen and red maple. TS# 043-99. TCR 2002. Cut all merchantable aspen, rm, jp, oak and rp16" + and wp14"+Stand was previously thinned. RM, O, WP, BC seedlings present, but oak is browsed. Blueberries.
43	4130 - Aspen	Poletimber Well	14.2	25	51-80	Aspen looks good for now but may want to re-start next entry. Big old red and white pine scattered around in stand. Scattered JP saplings and WP seedlings.
45	4191 - Mixed Upland Deciduous with Conifer	Sapling Poor	219.9	7	1-50	2017:Good regeneration after harvest. Most is oak, red maple with some aspen, jp, wp. Harvested2010. Residual white oak, red pine, and jack pine, plus some scattered red oak, red maple, white pine; plus 3 residual islands retained: one is stand #103, the other 2 are inclusions within stand 45 of 1.5 and 2.7 acres, mostly oak.2007:This is old savannah with a younger age class grown in. Lots of oak brush in places. Some 70, some 50 year old RP scattered around, and older stuff 70+ years old.
46	4130 - Aspen	Sapling Poor	4.4	5	Immature	2017: Aspen and cherry sprouts in pockets after harvest. Stocking of regeneration in stand is generally low/medium. Let stand develop. Residual oak, wp,rp and bf left from last harvest.
48	4310 - Pine, Oak Mix	Sawtimber Medium	6.6	82	81-110	
52	4126 - White, Black, N. Pin Oak	Sawtimber Medium	18.8	101	81-110	2017: Current stocking is moderate. Many understory pockets of oaks and white pine with a little red pine. Could reduce canopy cover to allow new age to form. Some well formed oak and pine in stand for retention. 2007:Moderately stocked with red maple, oak, and white pine seedlings; much of oak is browsed. Could do a release cut/overstory removal, leaving 10-20 BA of mixed species for seed trees and wildlife use. This would release white pine and some oak, and would result in aspen regeneration over much of the stand. May need stage 2 (BA-dbh) to determine distribution of aspen.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
53	42290 - Natural Mixed Pine	Poletimber Well	6.3	67	111-140	East end is mostly pole-sized planted red pine. Most of the jack pine is at the west end. Scattered veteran white pine throughout, 22+ inches dbh.
57	4126 - White, Black, N. Pin Oak	Sawtimber Medium	11.7	106	51-80	2017: Some larger oak and pine with poles mixed through. Stocking is moderate. Oak and wp saplings and seedlings in canopy gaps. Aspen is holding in stand. Keep stand at this time for aesthetics and diversity. 2007: Could do a selective log harvest to open stand up somewhat, or just leave it alone for aesthetics along road and snowmobile trail. Seed tree cut is also a possibility. Numerous oak seedlings present.
58	42290 - Natural Mixed Pine	Poletimber Poor	9.7	58	1-50	Scheck's Campground. Pines are of various sizes and ages, including some large veteran white pine. Age is on a larger red pine.
59	4126 - White, Black, N. Pin Oak	Sawtimber Medium	32.5	104	51-80	2017: Stump sprouts heavily browsed. Not much new recruitment into sub canopy of hardwoods or white pine. White pine sub-canopy left after harvest is advancing. 2007: Middling quality red oak, some may be pin oak or hybrids. Succeeding to white pine. Fair amount of oak seedlings in places, but heavily browsed. Terraced hill.
60	42200 - Natural White Pine	Sawtimber Well	9.9	99	141-170	Diverse stand. Terraces down to river. Big veteran pines in floodplain, plus cedar. Also some white birch, tamarack, red maple.
61	42220 - Natural Jack Pine	Sapling Poor	40.0	6	1-50	2017: Pretty good jp regeneration. Thinner regen in N part of stand. Some weevil damage but not too bad. Retention of WO, WP and small leaf pockets of jp/wp. 2007: Blueberries, wintergreen present. Residual white oak and white pine, plus a few red pine, jack pine, red oak.
62	4130 - Aspen	Poletimber Well	19.7	44	81-110	2017: More oak and wp/jp in west part of stand. Some bigger wp scattered in stand. Consider harvesting this stand to re-start. Good volume and height at this time which may be lost if kept another cycle. More wp poles in western end between other harvest. Could be retention pocket. 2007: Blueberries. JP in patches. Bigtooth aspen is mostly in the west part of the stand, south of the trail. Eastern most lobe is mainly cherry. Advanced seedling layer of red maple and cherry in places. Moderate amount of CWD from pines dying out and aspen self-thinning.
63	4126 - White, Black, N. Pin Oak	Sawtimber Well	1.0	111	81-110	Stand data copied from same type in adjacent compartment 48.
64	4126 - White, Black, N. Pin Oak	Sawtimber Medium	5.4	124	1-50	2017: similar to stand 45 but higher oak stocking. Keep for diversity. Let understory oak and jack pine grow in 2007: White oak island. Lots of oak regeneration trying to go.
65	42221 - Natural Jack Pine, Mixed Deciduous	Poletimber Medium	6.4	57	51-80	2017: Storm damaged, low density lower quality jp. Little developing in understory but cherry and a little wp. It would be good to harvest this stand and possibly re-plant if access can be obtained. Access is challenging with stand blocked by steep hill to the North and private land to south. 2007: Will hold 10 years. Hawthorn, blueberry, sweetfern. A few white pine and white oak saplings.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
68	4110 - Sugar Maple Association	Sawtimber Medium	13.0	115	81-110	2017: Lower quality hardwoods. Only beech cherry and ironwood noted in sub-canopy regen layer. 2007: Select cut in winter 2010-11. Fair amount of CWD. Small amounts of white oak, red oak, hemlock, white pine, and red maple in addition to listed species. White ash is dead/dying.
72	42110 - Planted Red Pine	Poletimber Well	49.4	49	141-170	2017: Tight spacing between rows and high basal area in places. Average 178. Not too much defect- could 3rd tree thin within rows. 4-5 stick trees. Spacious rows to operate through. 2007: Flat; straight to gently curving rows. 3 stick average. A few white pines. Red pine site index trees 2007: 58', 8" dbh, 53', 9.0" dbh, 47', 8.6" dbh, 45', 9.1" dbh. Scattered white pine, cherry.
74	42220 - Natural Jack Pine	Poletimber Well	10.4	50	81-110	2017: JP is still holding but could be harvested. Try to hold until adjacent recent harvests grow in a bit. 2007 Most JP is still 40-55, RP about the same. Stocking still kind of low. Let grow another cycle. Consider travel corridor if harvested.
75	4119 - Mixed Northern Hardwoods	Poletimber Well	4.3	70	1-50	Some scattered old oak and red pine with 60 year old aspen and red maple sprouts grown in.
76	4126 - White, Black, N. Pin Oak	Sawtimber Well	63.3	110	51-80	2017: Good ingrowth of understory in places. Heavy deer use. Fantastic habitat and feeding area adjacent to bedding areas. Let stand grow in. Overstory is most valuable for nut production. 2007: Oak left in the last harvest, nearly all white oak. JP, oak, RM, WP growing in. Oak overstory is a mix of poles and logs, slightly more canopy in poles.
78	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	33.3	93	51-80	2017: Stand is complicated. Older jp is falling out of stand but most aspen looks alright for now. There is a lot of pole sized wp throughout this stand that will continue to put on volume. With recent harvests on two sides of this stand it would be best to hold this stand until the new harvests grow in and develop. These mixed stands regenerate well in this area when clear cut with retention. Heavy retention seems to hinder regeneration. This stand has older oak and pine components that could be part of retention when this stand is harvested. 2007: Stand is a mosaic of numerous species and age classes, including old remnant oak and white pine, pole aspen and jack pine, and all ages/sizes of white pine. Aspen is in patches and is generally immature and can hold, though it is big enough to be merchantable in places. Jack pine varies somewhat in age, but is mostly older and showing some mortality.
81	4130 - Aspen	Poletimber Poor	4.4	46	1-50	Poor quality aspen. Semi-open stand. Trace of white oak.
82	42111 - Planted Red Pine, Mixed Deciduous	Poletimber Well	70.0	50	111-140	2017: Let this stand grow in. May never be able to thin due to rows and spacing. May want to just harvest and replant after this stand puts on more volume. Could be thinned but would have to be marked to try to put into more manageable spacing. Rows are unclear at this time. Variable spacing. Due to the structure of the surrounding stands, It would be good to try to keep this stand for diversity. Not too much understory developing. 2007: Looks like the original pine weave, planted around old oak and pine. Planted tight: 4x5, 5x5, 6x5?? How will we thin this? Rows are hard to follow. I think this would work better with a more open spacing so other species would mix in.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
84	42141 - Planted Mixed Pine, Mixed Deciduous	Poletimber Medium	75.1	25	Immature	2017: Red pine growing more in diameter than height. Deer bedding and snowshoe hares. 2007:15 year old plantation with considerable black cherry and jack pine ingrowth. Red pine seems to have struggled along, but decent growth the last 5 -7 years. Many open areas.
85	4126 - White, Black, N. Pin Oak	Sawtimber Well	127.3	198	81-110	2017: Some patch cuts in this may be a good idea. May be able to trench and weave in red pine to supplement any natural regeneration and increase diversity and value of stand. Ground lays good. 2007: Lots of oak seedlings, but few over 2-3' tall. Aspen is dying out. Some particularly older, larger white oak throughout. Could do some patch cuts or an over story removal but stand will endure without management and will continue to succeed to white pine/red maple with time. Conversion of some of this stand to red pine is another possibility (check RP Project guidelines). Possible old growth?
86	42220 - Natural Jack Pine	Sawtimber Well	125.4	69	81-110	2017: portion of this stand was chip harvested and has not regenerated well. (Now stand 90) The jack pine is starting to fall out of this stand with some oak and white pine coming in in the understory. The red pine in this stand is far superior to the jack pine in growth and form. This stand could be harvested and trenched and planted to red pine. Greenup concerns with the stand that was previously harvested. Consider treating part of this stand in any case. 2007: Some mortality in JP, but holding fairly well; may well last another 10 years. We should cut at least part of the stand this entry period to avoid having to cut all next time. Clearcut with residuals, or seed tree cut leaving some white oak and red pine scattered in cut blocks. Regenerate to JP or RP, with some oak likely to grow past the deer, too. Some areas heavier to oak could be considered for uncut blocks or corridors between any planned cut patches. Small amounts of red maple, cherry, white pine in addition to listed species.
92	4126 - White, Black, N. Pin Oak	Poletimber Poor	2.4	58	1-50	2017: Low density jp,wp,wo,rm. n Save as buffer along cut to north. 2007:Fair amount of JP snags and blowdown. Blueberry, sweetfern.
93	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Medium	39.4	111	1-50	2017: Mixed up age classes in stand. Older oak and pine scattered around(110 age) with 60 yr old class of rp,wp, oak, aspen and maple and then some patches or maple/aspen regen age 16. Hold this stand until younger age class of aspen becomes merchantable. 60 yr old class looks fine at this time. Some younger rp and wp poles.2007:2-storied stand. Aspen, red maple thick in regen holes. Numerous oak seedlings; most are browsed to snow line, but some are gaining height and should take off. Could do an overstory removal, but may be best to wait 10 years to allow regeneration to advance more and to put some additional size/volume on aspen and pine that would get cut.
95	4122 - Oak, Pine	Sawtimber Poor	17.3	111	1-50	2017: Most of oak regeneration is still less than 1/2" diameter and under brouse line. Let oak understory develop before any overstory removal. Nice habitat in stand. 2007:Oak regeneration is thick, but heavily browsed. Numerous red maple seedlings, some cherry and jack pine. Scattered red maple stump sprouts. Blueberry patches.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
96	42290 - Natural Mixed Pine	Poletimber Medium	12.2	67	81-110	2017: Scattered Large old remnant white oak with several large old rp/wp. Filled in with pole/small log stand of wp/rp/jp/wo. Jack pine is starting to fall out of stand. Some areas are overstocked but other areas are fine. This stand could be marked to release better stems but may be best to wait for next cycle. If good pine pulp market exists, consider treating this stand in this entry. Manage for white pine/red pine with some oak/rm. 2007: Abundant white oak seedlings, browsed ot snow line. Low-stocked remnant overstory of WO, WP, RP, JP, with a moderately stocked WP pole component. Probably best to let older trees die off gradually, releasing WP poles, and managing long term for WP. Could alternatively do a removal cut of JP and some oak.
97	4126 - White, Black, N. Pin Oak	Sawtimber Poor	11.6	106	51-80	2017: Older low stocked white oak with pockets of jp. Could cut back to scattered residual and plant red pine Wait for recently harvested stand to north to develop. . 2007: Could possibly burn for blueberry enhancement and tree regeneration/site prep. Generally low quality white oak. Stand has thick blueberry; also bracken fern, sweetfern, white oak seedlings.
98	4199 - Other Mixed Upland Deciduous	Sapling Poor	2.0	6	Immature	clearcut fall 2010
99	4131 - Aspen, Oak	Sapling Poor	4.3	6	1-50	2017: Shift to forested stand. Scattered rp and oak retention with sapling stand forming after harvest. Clearcut fall 2010. Sedge, wintergreen, blueberry, trailing arbutus present.
100	4199 - Other Mixed Upland Deciduous	Sapling Poor	2.3	6	Immature	2017: ASPEN AND RED MAPLE SPROUTS WITH WP/OAK/RP SEEDLINGS. Clearcut fall 2010.
101	4310 - Pine, Oak Mix	Sawtimber Well	61.7	65	51-80	2017: Jack pine/oak dominated stand. Oak saplings growing in as jp declines but most of the jack pine was holding for now. Makes good travel area for deer between younger stands and recent harvests. May want to consider getting jack pine out and poorly formed oak and letting stand fill back in with oak, red maple and jack pine. Consider planned harvests in a C 53. Plan travel strip for retention. 2007: This is old savannah with a younger age class grown in. Lots of oak brush in places. JP: most is 50-55, some 70 years old. Some 70, some 50 year old RP scattered around, and older stuff 70+ years old.
102	4310 - Pine, Oak Mix	Poletimber Well	38.2	104	81-110	2017: The jp cd/acre is low in this stand. There are pockets of thicker jp but it is generally scattered through. The overall stand stocking is also generally low. Oak saplings and poles are growing in through the gaps in the stand. Let stand develop at this time. Jp may fall out but nurse oak. Lots of oak trying to come in to understory. Jack pine is mature and should be harvested soon. Red pine is good in this stand. Could shelter wood/seed tree harvest this stand keeping well formed oak and red pine in canopy. Reduce basal area to 10-40 to allow oak understory to advance. 2007: This is old savannah with a younger age class grown in. Lots of oak brush in places. JP: most is 50-55, some 70 years old. Some 70, some 50 year old RP scattered around, and older stuff 70+ years old. Harvest jack pine in stand 24 as well as part of this harvest and mark that stand as needed for release.
103	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	5.7	116	81-110	2017: Retention area for timber sale. Being used as deer bedding area. Jack pine falling This is old savannah with a younger age class grown in. Lots of oak brush in places.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
104	4126 - White, Black, N. Pin Oak	Sapling Poor	16.0	6	Immature	2017; Pine and oak retention. Good regeneration of oak with some aspen/wp/jp/rm. Some of the oak is past browse height. CLEARCUT WITH RETENTION 2010. CUT TO 2" BUT NO RP OR GREEN MARKED.
105	6112 - Lowland Aspen	Poletimber Poor	2.2	70		Traces of white cedar. Phellinus in aspen.
106	4130 - Aspen	Sapling Poor	12.2	5	Immature	2017. Decent regeneration of aspen after harvest.
107	6112 - Lowland Aspen	Sapling Poor	25.7	5	Immature	2017: Good aspen regeneration in places. Some areas have thick tag alder and other areas are mixed aspen and alder. Residual wp and bf. 2007: Patches of heavily browsed red osier dogwood. Traces of balsam fir, black spruce, and white cedar; some white pine.
108	42250 - Pine, Oak	Poletimber Poor	22.4	37	1-50	2017: Red maple stump sprouts prevalent. Some aspen clones regenerating. White pine poles and saplings left from last harvest are heavy in some areas. Regeneration after harvest is moderate. Some oak past browse height but most is getting eaten. 2007: Variable ages in oak. 3/4 acre uncut retention island in middle of stand.
109	4191 - Mixed Upland Deciduous with Conifer	Sawtimber Well	7.2	50	111-140	2017: stand is mixed composition with 49 age aspen and rm with oak logs and poles, and a little rp/wp. Some jp aged 65-70 with storm damage. Split off the west side of this stand in this inventory which is now stand 40.
110	4126 - White, Black, N. Pin Oak	Sapling Poor	17.8	7	Immature	2017: Good regeneration in most areas. A bit of the stand has pockets with lower density rm sprouts and a little white pine but most of the area has good aspen a,rm, oak with lower stocking of jp, wp. 2007 Expected to regenerate naturally to JP or RP, with some oak likely to grow past the deer, too.



Stand Cover Type

Acres

Managed
Site

General Comments:

#Type!
